

CLAIMS:

1. An information providing apparatus for providing  
5 prescribed information to a user terminal,  
comprising:  
a receiving unit configured to receive a first  
request for a frame page containing said prescribed  
information from the user terminal; and  
10 a frame page creator configured to extract  
identification information specifying said prescribed  
information from a first URL designated in the first  
request, and create the frame page having a plurality  
of frames and allowing said prescribed information to  
15 be displayed in a first frame among said frames.
- 20 2. The information providing apparatus of claim 1,  
wherein the frame page creator is configured to  
create the frame page such that second information  
associated with said prescribed information is to be  
displayed in a second frame so as to match the  
25 prescribed information displayed in the first frame.

5    3. The information providing apparatus of claim 2,  
      wherein the second information is site map  
      information of the prescribed information.

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      4. The information providing apparatus of claim 2,  
      wherein the second information is to be displayed in  
      a tree structure in the second frame.

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      5. The information providing apparatus of claim 1,  
20    wherein the frame page creator is configured to  
      create the frame page such that the frame page is to  
      be displayed according to a layout designated by the  
      identification information contained in the first URL.

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6. The information providing apparatus of claim 1,  
wherein the frame page creator is configured to  
5 create the frame page such that the frame page is to  
be displayed with a language designated by the  
identification information contained in the first URL.

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7. The information providing apparatus of claim 6,  
further comprising:

a determination unit configured to determine  
15 whether the language designated by the identification  
information is supported by the information providing  
apparatus.

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8. The information providing apparatus of claim 7,  
wherein the frame page creator is configured to  
create the frame page such that the frame page is to  
25 be displayed with a language used in an operations

panel of the image providing apparatus if the language designated by the identification information is not supported by the information providing apparatus.

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9. The information providing apparatus of claim 1,  
10 wherein the frame page creator is configured to create the frame page such that the frame page is to be displayed in a user mode designated by the identification information contained in the first URL.

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10. The information providing apparatus of claim 1,  
wherein the identification information contained in  
20 the first URL is argument information.

25 11. The information providing apparatus of claim 1,

further comprising format information that defines a  
format of the frame page, wherein the frame page  
creator is configured to apply the identification  
information contained in the first URL to the format  
5 information to create the frame page.

10 12. The information providing apparatus of claim 11,  
further comprising a data converting unit configured  
to convert the identification information of a  
prescribed format into a format suitable for creation  
of the frame page, wherein the frame page creator  
15 creates the frame page based on the converted  
identification information.

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13. The information providing apparatus of claim 12,  
further comprising one or more Web page creators,  
wherein the data converting unit is used in common  
among the Web page creators and the frame page  
25 creator.

5 14. The information providing apparatus of claim 11,  
wherein the format information includes an extensible  
stylesheet language (XSL) file.

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15 15. The information providing apparatus of claim 14,  
wherein the frame page creator converts the  
identification information contained in the first URL  
into XML data, and applies the XML data to the XSL  
file to create the frame page.

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16. The information providing apparatus of claim 12,  
wherein the format information includes an extensible  
stylesheet language (XSL) file, the frame page  
creator converts the identification information  
25 contained in the first URL into XML data, and the

data converting unit executes XSL transformation on the XML data.

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17. The information providing apparatus of claim 1, further comprising a loading page creator configured to create a loading page that defines an instruction  
10 for causing the user terminal to load the frame page, wherein the receiving unit receives a second request containing a second URL without a path name from the user terminal prior to receipt of the first request, and the loading page creator creates the loading page  
15 in response to the second request.

20 18. The information providing apparatus of claim 17, wherein the identification information contained in the first URL designated by the user terminal is argument information that is contained in the second URL and described in the loading page.

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19. The information providing apparatus of claim 1,  
5 further comprising:

an e-mail creating unit configured to create an  
e-mail containing a second URL that includes the  
identification information but not having a path name,  
the created e-mail being transmitted to the user  
10 terminal.

15 20. The information providing apparatus of claim 17,  
further comprising:

an e-mail creating unit configured to create an  
e-mail containing the second URL that includes the  
argument information, the created e-mail being  
20 transmitted to the user terminal prior to receiving  
the second request.



21. The information providing apparatus of claim 1,  
wherein the information processing apparatus is an  
image processing apparatus.

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22. An information providing apparatus for  
transmitting a web page to a user terminal connected  
10 via a network, in response to a request from the user  
terminal, comprising:

frame page creating means for creating a frame  
page in response to the request, such that the frame  
page is divided into a plurality of frames and that  
15 prescribed information specified by identification  
information contained in an URL designated in the  
request is displayed in a predetermined frame among  
the frames in the frame page.

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23. An information displaying device comprising:

web page requesting means that transmits a first  
25 request for a web page to an information providing

apparatus connected via a network, the first request containing a URL including identification information for specifying target information;

receiving means that receives a definition of the requested web page from the information providing apparatus; and

displaying means that displays a frame page with the target information viewed in one of a plurality of frames formed in the frame page.

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24. The information displaying device of claim 23, further comprising loading means that loads the frame page,

wherein the web page requesting means transmits a second request containing a second URL to the information providing apparatus prior to transmitting the first request,

the receiving means receives a loading page defining an instruction for loading the frame page from the information providing apparatus, and

the loading means loads the frame page based on the loading page.

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- 5 25. The information displaying device of claim 24,  
wherein the second URL does not contains a path name.